

We claim:

1. The components of shelf life indicator for fresh cut fruits and vegetable, which was responded to CO<sub>2</sub> concentration, was composed of Methyl red and/or Bromthymol blue and/or NaHCO<sub>3</sub> buffer and/or Phenolic compound and/or Phenolic derivative and/or water and/or absorbent and/or Sachet.
2. The device of claim 1 wherein said the components were mixed together or used it only one.
3. The device of claim 1 and 2 wherein said methyl red was mixed in 0.001 to 1.0 percent of w/v.
4. The device of claim 1 to 3 wherein said Bromthymol blue was mixed in 0.001 to 1.0 percent of w/v.
5. The device of claim 1 to 4 wherein said NaHCO<sub>3</sub> was mixed in 0.001 to 1.0 Molar
6. The device of claim 1 to 5 wherein said Phenolic compound and/or Phenolic derivative from plant and Synthetic were Anthocyanin, Flavonoid derivative, betalain and/or betalain derivative, Chlorophyll, Lycopene and/or Carotenoid.
7. The device of claim 1 to 6 wherein said Phenolic and/or its derivative from plant and/or Synthetic was 0.001 to 10 percent or w/v.
8. The device of claim 1 to 7 wherein said water was dissolved.
9. The device of claim 1 to 8 wherein said the absorbent were plant fibers which were purified or non purified and/or inorganic and organic matter.
10. The device of claim 1 to 9 wherein said absorbent were inorganic and organic matter which did not react with the components of indicator.
11. The device of claim 1 to 10 wherein said the sachets were made from plastic and/or plant fiber and/or transparent films from starch base polymer that CO<sub>2</sub> permeated.
12. The device of claim 1 to 10 wherein said the indicator was changed color from green tone to orange or red orange tone. The green tone was signal for good quality of fresh cut but orange or red orange tone was signal for quality loss or shelf life loss.
13. The device of claim 1 to 10 wherein said the process was to mix the indicator ingredient, then absorbent was immerse in the indicator solution and packed it to the sachet.
14. The device was from claim 13

15. The device of claim 14 wherein said the indicator appropriated for fresh cut fruits and vegetables which were packed in the packages.
16. The device was appropriate for indicate shelf life of fresh cut fruits and vegetables.